

IVLIYEV, L.A.

Parasites of the larch spinner (*Dendrolimus sibiricus* Tschtv.) in  
the Soviet Far East and adjacent countries. Spob.DVFAN SSSR no. 12:  
119-123 '60. (MIRA 13:11)

1. Dal'nevostochnyy filial imeni V.L.Komarova Sibirs'kogo otdeleniya  
AN SSSR.

(Silkworms---Diseases and pests)

IVLIYEV, L. A., CAND BIO SCI, "SIBERIAN SILKWORM IN THE  
FORESTS OF THE FAR EAST." VLADIVOSTOK, 1961. (ACAD SCI  
USSR. SIBERIAN DEPT. JOINT <sup>Acad</sup> ~~SCI~~ COUNCIL FOR BIO SCIENCES).  
(KL-DV, 11-61, 214).

-83-

IVLIYEV, L.A.; SINCHILINA, Ye.M.

Tussock moth and its effect on the fluctuation in the abundance of  
the tent caterpillar in the Amur Valley. Vop. ekol. 7:65-67 '62,  
(MIRA 16:5)

1. Dal'nevostochnyy filial Sibirskogo otdeleniya AN SSSR,  
Vladivostok.

(Amur Valley--Tussock moth)  
(Amur Valley--Tent caterpillars)

IVLIYEV, L.A.; KONONOV, D.G.

Some mass pests of conifer seeds in Kamchatka. Soob. DVFAN SSSR  
no. 15:83-88 '62. (MIRA 17:9)

1. Dal'nevostochnyy filial imeni Komarova Sibirskogo otdeleniya  
AN SSSR.

KOSTIN, V.D.; KRYLOV, A.V.; IVLIYEV, L.A.

Leaf beetle Galeruca tanaceti L., a potential potato pest in  
Kamchatka. Soob. DVFAN SSSR no.17:97-99 '63.

(MIRA 17:9)

1. Dal'nevostochnyy filial im. V.L. Komarova Sibirsckogo otdeleniya  
AN SSSR.

IVLIYEV, L.A.; KONOV, D.G.

Longicorn beetles of Kamchatka. Soob. DVFAK SSSR no.19:  
117-123 '63. (MIRA 17:9)

1. Biologo-pochvennyy institut d'nevostochnogo filiala  
Sibirskogo otdeleniya AN SSSR.

KAPIANSKIY, Ya., kand.tekhn.nauk; IVLIYEV, M., inzh.

New instrument for determining tension in reinforcements. Stroitel'  
no.6:31 Je '58. (MIRA 11:7)  
(Prestressed concrete--Testing)

S/193/60/000/012/018/018  
A004/A001

AUTHOR: Ivliyev, M. I.

TITLE: The Non-Ferrous Metallurgy of Bulgaria

PERIODICAL: Byulleten' tekhniko-ekonomiceskoy informatsii, 1960, No.12, pp.68-69

TEXT: The author presents a report on the development of the non-ferrous metallurgy in the People's Republic of Bulgaria and states that in 1959 the output of lead concentrate amounted to 115,000 tons, that of zinc concentrate to 107,000 tons, while the copper-concentrate output was 55,000 tons. After the effectiveness of geological prospecting was increased under the second Five-Year Plan, rich deposits of lead, zinc and copper ores and other minerals were discovered. At present, the prospected lead and zinc ore deposits amount to more than 100 million tons. The Rodop Mining Fields are the main raw material base for the non-ferrous metallurgy. There are 21 mines in the Madan Rayon. Moreover, important deposits of lead and zinc ores were discovered in the Nedelin, Madzharov and Ustrem Rayons and at the northern slopes of the Rodop mountains. Semi-metallic ores were discovered in the Osogov mountains. The author emphasizes the importance of capital investments which were made during the two Five-Year Plans and which accelerated ✓

Card 1/4

The Non-Ferrous Metallurgy of Bulgaria

S/193/60/000/012/018/018  
A004/A001

the expansion of geological prospecting. Thus a total of 2.5 billion levs were invested from 1948 - 1957, out of which 1.6 billion levs were spent on prospecting and 234 million levs on machinery and installations. During this time 1,14 million m of drilling and 660,000 running meters of mine sinking was effected. The ratio of capital investment to increase in industrial reserves is estimated at 100 : 20,000 levs. Based on these prospecting results and with the aid of the Soviet Union, mines totaling an annually output of 1.7 million tons of lead and zinc ore were constructed or rebuilt, while the concentration plants at present have a total capacity of 3,500 tons of ore per day. During the last years an important increase in prospected copper deposits could be noticed. Geological prospecting concentrated mainly on the deposits in the Panagyur, Burgas and Erachan rayons. A new big copper-ore deposit, "Medet", was discovered and is being worked in open-pit mining, warranting an output of 20,000 tons of electrolytic copper annually. Non-ferrous metallurgical plants were built with the aid of the Soviet Union. In 1959 Bulgaria produced 33,000 tons of copper and 9,000 tons of zinc. Under the present Five-Year Plan, the erection of the big lead and zinc plant at Plcdiv was started, having a projected capacity of 40,000 tons of lead and 30,000 tons of zinc per year. In 1960 the copper works of Zlatitsa-Firdom will have a capacity of 15,000 tons of electrolytic copper per year. The development of the Bulgarian

Card 2/4

S/193/60/000/012/018/018  
A004/A001

The Non-Ferrous Metallurgy of Bulgaria

non-ferrous industry can be seen from table 1, while table 2 shows the total increase in heavy-industry products.

Table 1  
 1) kind of product; 2) lead and zinc ores; 3) copper ores; 4) lead concentrate (70%); 5) zinc concentrate (52%); 6) copper concentrate (20%), lead.  
 (all figures in 1,000 tons)

Таблица 1  
В тыс. т

1) Вид продукции	1939 г.	1948 г.	1952 г.	1957 г.	1959 г.
2) Свинцово-цинковые руды . . . . .	24	162	723	1053	2783
3) Медные руды . . . . .	4	47	147	502	913
4) Свинцовый концентрат (70%) . . . . .	3	17	58	90	115
5) Цинковый концентрат (52%) . . . . .	2	10	43	87	107
6) Медный концентрат (20%) . . . . .	—	2,7	9	30	55
7) Свинец . . . . .	0	2	2,7	10	33

Card 3/4

S/193/60/000/012/018/018  
A004/A001

## The Non-Ferrous Metallurgy of Bulgaria

Table 2

1) total increase of heavy-industry products (in%); 2) electric power; 3) fuel;  
 4) ferrous metallurgy; 5) non-ferrous metallurgy; 6) mechanical engineering  
 and metal-working; 7) chemical industry.

Таблица 2  
В процентах

	1939 г.	1948 г.	1958 г.	1959 г.
1) Общий объем продукции тяжелой промышленности . . . . .	100	100	100	100
в том числе:				
2) электроэнергетическая . . . . .	8,2	5,0	5,2	5,8
7) топливная . . . . .	20,3	11,4	6,8	6,8
4) черная-металлургия . . . . .	1,0	0,2	2,4	3,4
5) цветная металлургия . . . . .	1,3	6,4	10,1	11,4
6) машиностроение и металло-обработка . . . . .	10,5	19,9	30,1	30,2
7) химическая промышленность . . . . .	6,3	2,3	6,2	7,9

There are 2 tables and 3 non-Soviet references.

Card 4/4

IVLIYEV, N. I.

IVLIYEV, N. I.: - "Oaks for artificial plantin on the chernozem soils of the Trans-Volga portion of Kuybyshev Oblast". Kuybyshev, 1955. Min Higher Education USSR, Khar'kov Order of Labor Red Banner Agricultural Inst imeni V. V. Dokuchayev. (Dissertation for the Degree of Candidate of Agricultural Sciences)

SO: Knizhnaya Letopis', No. 40, 1 Oct 55

K

COUNTRY	: USSR
CATEGORY	: Forestry, Forest Cultures.
ABS. JOUR.	: RZhBiol., No. 4, 1959, No. 14506
AUTHOR	: Ivliev, N.I.
INST.	: Kuybyshevsk Agric. Inst.
TITLE	: Experiments with Oak Cultures in mixed Plantations in the Trans-Volga Area.
ORIG. PUB.	: Izv. Kuybyshevsk. s.-kh. in-ta, 1958, 13, 245-252
ABSTRACT	: Investigations were conducted in 1952 - 1954 on plantations of oak mixed with the common or English elm, common ash, holly, maple, etc., larch, birch, common lime, and Norway spruce 50 years old and sown on ordinary loamy, clayey chernozem soils in Kuybyshevskaya Oblast. It was determined that it was more advantageous to cultivate the oak in mixed plantations, but under these conditions the holly angle must be regarded as a basic companion.

WORD:

1/2

29

Ivliyev, N.K.

127-58-6-13/25

AUTHORS: Tsoy, N.D., and Ivliyev, N.K., Mining Engineers

TITLE: Mass Blasting of a Block in the Bystrushinskiy Mine (Massovyy vzryv bloka na Bystrushinskoye rуднике)

PERIODICAL: Gornyy Zhurnal, 1958, Nr 6, pp 48-52 (USSR)

ABSTRACT: This is a detailed description of the mass blasting of a block in the Bystrushino mine. The authors present calculations for using explosives, electric current and also give the exact timing of all preparatory operations. There are 3 figures and 2 tables.

AVAILABLE: Library of Congress  
Card 1/1      1. Explosives-Applications

S/196/62/000/010/029/035  
E194/E155

AUTHORS: Platonov, G.F., and Ivliyev, N.K.

TITLE: Operating experience with induction equipment for heating containers at the Leninogorskiy Polimetallichесkiy Kombinat (Leninogorsk Polymetal Combine)

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.10, 1962, 15, abstract 10 K80. (Metallurg. i khim. prom-st' Kazakhstana. Nauchno-tekhn. sb. (Metallurgical and Chemical Industry of Kazakhstan. Scientific-technical Symposium), no.4, 1961, 31-36).

TEXT: An induction method of heating steel containers for the transport of concentrate was proposed at the Leninogorsk Polymetal Combine. In 1960 Kazgiprosvetmet designed a three-section pilot plant of this kind. Each section of the equipment consists of a concrete cone which houses the inductor winding. Fire-resisting concrete and a number of guides of non-magnetic steel are used to protect the inductor against mechanical damage. The gap between the equipment walls and the container is 55 mm;

Card 1/2

Operating experience with ...

S/196/62/000/010/029/035  
E194/E155

the container rests on the spring mounted heat-resistant base of the equipment. A sump and discharge tube are provided for drainage of condensate and sludge. Remote control equipment and thermal pick-ups are provided. The reactive power is compensated by static capacitors. The power demand of the equipment is 26-30 kW, the voltage 348-360 V, the operating current 124-150 A and the power factor 0.6. Heat-resistant concrete was found unsuitable for insulating the inductors of this type of installation because the concrete was hygroscopic and there were heavy leakage currents exceeding the operating current. Therefore, the inductor was made of hollow conductor wound on a laminated plastic frame. In the period December-February the heating time for the containers was 8-12 minutes, and in the period March-November 3-5 minutes. The corresponding electric power consumptions are 3-4 kWh and 1.5-2 kWh per container, which is much more economic than the hot air, hot water or steam systems hitherto used.

[Abstractor's note: Complete translation.]

Card 2/2

IVLIYEV, N. N.

"Study of the Synthesis of Triazines from Urea." Min. Higher Education USSR, Gor'kiy Polytechnical Inst imeni A. A. Zhdanov, Gor'kiy, 1955. (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No. 22, 1955, pp 93-105

KUPLYAYEV, I.M. (Leningrad, B. Pushkarskaya ul. d. 30., kv.27); IVLIYEV, K.M.  
(Gor'kiy, ul. Radistov, d.6, kv.6'; CHEHOV, Yu.G. (Gor'kiy, ul.  
Radistov, d. 6, kv.6); PISAREV, A.L. (Moskva, Ljubertsy, 4. pos.  
Vsesoyuznogo nauchno-issledovatel'skogo ugol'nogo instituta, d.5, kv.5);  
GASPAROV, R.G. (Moskva, I-51, 2-y Kolobovskiy pereulok d.9/2 kv.18);  
POPOV, B.I. (Irkutsk, 13, Depovskiy pereulok, d.83, kv.2); PIONTKOVSKIY,  
B.A. (Moskva, Ye-77, Sredne-Pervomayskaya ul. d.13, kv.4); VEDENEYEV,  
G.M. (Moskva, I-110, B. Spasskaya, d. 15/17, kv.29); KRECHER, V.G.  
(Uzhgorod, Zakarpatskaya obl., ul. Kosmodem'janskoy, d.4, kv.69);  
SIDORENKO, A.P. (Leningrad, ul. Frunze, d.15, kv.38); SPIRIDONOV, A.V.  
(Leningrad, ul. Frunze, d.15, kv.38); SEREDA, P.A. (Moskva);  
IL'IN, V.F.; PEL'TSMAN, L.N.; DANILEVICH, A.I. (Khar'kov, Plekhanovskiy  
pereulok, d.9a, kv.2); KHIMENKO, L.T. (Khar'kov, Plekhanovskiy pereulok,  
d.92, kv.2); LYKOV, M.V. (Moskva, Leninskiy prospekt, d.55);  
RYBAL'CHENKO, G.F. (Moskva, Leninskiy prospekt, d.55); BOYKO, V.F.  
(Leningrad, M-142, ul. Tipanova, d.3, kv.130); KITAYEV, G.I. (Chelya-  
binsk, Smolenskaya ul. d.4); SKLYAROV, A.Ye. (Novocherkassk, Rostov-  
skoy obl. pos. Oktyabr'skiy, Gvardeyskaya ul. d.30, kv.29)

Discoveries and inventions. Prom. energ. 19 no.11:57-58 N '64.  
(MIRA 12:1)

1. Zavod "Amurkabel'", Khabarovsk (for Il'in, Pel'teman).

BANDURIN, A. (g. Izhevsk); CHEREZOV, V. (g. Izhevsk); NIKITIN, V. (g. Yaroslavl');  
YURTSEV, V.; PERMYAKOV, M.V., inzh.; KOKORIN, V.K., inzh.;  
TASHKINOV, V., inzh.-konstruktor; IVLIVEV, V., tekhnik-stroitel'  
(pos. Ashukino Moskovskoy obl.); DUBROVIN, B., g. Votkinsk);  
GUSAROV, L. (g. Aleksin); SHCHETININ, N.

Advertising board. Izobr. i rats. no. 5:60-61. My '61.  
(MIRA 14:5)

1. Glavnnyy inzh.fabriki "Iskra", g. Blagoveshchensk, Amurskaya obl.  
(for Yurtsev). 2. Zavod imeni Sergo Ordzhonikidze, konstruktorskoye  
byuro, g. Chelyabinsk (for Permyakov, Kokorin). 3. Zamestitel'  
glavnogo inzh.Zyryanovskogo svitsovogo kombinata (for Shchetinin).  
(Technological innovations)

IVLIYEV, V.G., inzhener

The finishing plant in the Gori Cotton Combine begins to function.  
Tekst.prom.15 no.10:19-23 0'55. (MLRA 8:12)  
(Gori--Cotton finishing)

IVLIYEV, V.G., inzhener.

Planning an automatic factory. Tekst. prom. 17 no. 5:30-35 My '57.  
(Textile industry--Automation) (MLRA 10:6)

11/11/86 v. 3.0

I. A. TAVASHEV (G.D.)

PHASE I BOOK EXPLOITATION SOV/5410

Tashkentskaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii, Tashkent, 1959.

Trudy (Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy) v. 2. Tashkent, Izd-vo AN UzSSR, 1959. 449 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agency: Akademiya nauk Uzbekskoy SSR.

Responsible Ed.: S. V. Starodubtsev, Academician, Academy of Sciences Uzbek SSR. Editorial Board: A. A. Abdullayev, Candidate of Physics and Mathematics; D. M. Abdurazulov, Doctor of Medical Sciences; U. A. Arifov, Academician, Academy of Sciences Uzbek SSR; A. A. Borodulina, Candidate of Biological Sciences; V. N. Ivashev; G. S. Ikramova; A. Ye. Kiv; Ye. M. Lobanov, Candidate of Physics and Mathematics; A. I. Nikolayev, Candidate of Medical Sciences; D. Mishanov, Candidate of Chemical Sciences; A. S. Sadykov, Corresponding Member, Academy of Sciences USSR, Academician, Academy of Sciences Uzbek SSR; Yu. N. Talanin,

Car #1/20

176

Transactions of the Tashkent (Cont.)

SOV/5410

Candidate of Physics and Mathematics; Ya. Kh. Turakulov, Doctor of Biological Sciences. Ed.: R. I. Khamidov; Tech. Ed.: A. G. Babakhaneva.

PURPOSE : The publication is intended for scientific workers and specialists employed in enterprises where radioactive isotopes and nuclear radiation are used for research in chemical, geological, and technological fields.

COVERAGE: This collection of 133 articles represents the second volume of the Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy. The individual articles deal with a wide range of problems in the field of nuclear radiation, including: production and chemical analysis of radioactive isotopes; investigation of the kinetics of chemical reactions by means of isotopes; application of spectral analysis for the manufacturing of radioactive preparations; radioactive methods for determining the content of elements in the rocks; and an analysis of methods for obtaining pure substances. Certain

Card 2/20

176

- Transactions of the Tashkent (Cont.) SOV/5410
- instruments used, such as automatic regulators, flowmeters, level gauges, and high-sensitivity gamma-relays, are described. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

RADIOACTIVE ISOTOPES AND NUCLEAR RADIATION  
IN ENGINEERING AND GEOLOGY

Lobanov, Ye. M. [Institut yadernoy fiziki UzSSR - Institute of Nuclear Physics AS UzSSR]. Application of Radioactive Isotopes and Nuclear Radiation in Uzbekistan

7

Taksar, I. M., and V. A. Yanushkovskiy [Institut fiziki AN Latv SSR - Institute of Physics AS Latvian SSR]. Problems of the Typification of Automatic-Control Apparatus Based on the Use of Radioactive Isotopes

9

Card 3/20

- 19
- Transactions of the Tashkent (Cont.) SOV/5410
  - Khrushchev, V. G., A. S. Lepilin, U. Ya. Margulis, S. N. Stepanov, L. I. Belen'kiy, T. V. Bromberg, and V. G. Ivilyev. [Ministry of Health USSR]. Industrial Gamma-Plant for Sterilization of Medical Materials 170
  - Khrushchev, V. G., B. A. Rubin, L. V. Metlitskiy, A. I. Rytov, N. M. Gayzin, U. Ya. Margulis, V. S. Grammatikati, V. G. Vlasov, and A. V. Petrov [Ministry of Health USSR]. Gamma-Plant for Continuous Irradiation of Potatoes 182
  - Prakof'yev, N. S. [Institut ekonomiki AN SSSR - Institute of Economics AS USSR]. Economic Efficiency of the Use of High-Capacity Gamma-Plants in the Light and Food Industry 192
  - Abdullayev, A. A., Ye. M. Lobanov, A. P. Novikov, and A. A. Khaydarov [Institute of Nuclear Physics AS UzSSR]. Use of a Multichannel Scintillation Gamma-Spectrometer for the Analysis of Rock Specimens 199

Card 10/20

SADOV, F.I., doktor tekhn. nauk, prof.; CHAPLINA, N.D.; IVLIYEV,  
V.G.; LUR'YE, A.L.; ABEZGUZ, A.Ya.; DYNIN, F.M.; ESKIN,  
I.L.; VASILL'YEV, G.V.; GAL'PERIN, M.M., retsenzent;  
IL'INSKIY, N.S., retsenzent; MORYGANOV, P.V., doktor  
tekhn. nauk, prof., retsenzent; MOSHKIN, V.I.,  
retsenzent; RUDAKOV, D.N., retsenzent; TSVETKOV, M.N.,  
retsenzent; DUKHOVNYY, F.N., red.

[Design and planning of finishing factories for the cotton  
industry] Proektirovaniye otdelochnykh fabrik khlopcato-  
bumazhnoi promyshlennosti. Moskva, Legkaia industriia,  
1965. 355 p. (MIRA 18:7)

IVLIYEV, V.T.

Work carried out by the laboratory of the Leningrad plant of dental  
materials. Med.prom. 11 no.4:49 Ap '57. (MLRA 10:6)  
(DENTAL MATERIALS)

IVLIYEV, Yakov Dmitriyevich; SHEKHURIN, Diodor Yefremovich; VERSHILOVA, N.A.,  
red.; GVIRTS, V.L., tekhn.red.

[Organizing technical information and propaganda in research  
institutes] Organizatsiya tekhnicheskoi informatsii i propagandy  
v nauchno-issledovatel'skikh institutakh. Pod.red.N.A.Vershilovo.  
Leningrad, Leningr.dom nauchno-tekhn.propagandy, 1956. 42 p.  
(Bibliotekha rabotnikov po tekhnicheskoi informatsii i ratsionalizatsii,  
no.8) (MIRA 11:1)

(Technology--Information services)

IVLIYEVA, A., kand.ekon.nauk

Characteristics of structural cost calculations for passenger and  
freight-passenger river craft. Rech.transp. 19 no.1:31-33 Ja  
'60.

(Shipbuilding--Costs)

(MIRA 13:5)

IVLIYEVA, A., kand.ekonom.nauk; POSTNOV, A., kand.tekhn.nauk;  
TAMBERG, D., kand.tekhn.nauk

Technical and economic grounds for new roader types.  
Rech. transp. 21 no.12;23-24 D '62. (MIRA 15:12)  
(Merchant ships—Cost of operation)

YERPICHEV, M.I., inzh.; IVLIYEVA, A.M., kand.ekonomiceskikh nauk

Comparative analysis of the economic indices of ships with  
various power plants. Trudy LIVT no.3:3-22 '60. (MIRA 15:3)  
(Inland water transportation--Accounting)  
(Marine engines)

IVLIVEVA, A.M., kand.ekon.nauk; ALAKIN, P.M., inzh.; BULOV, A.A., inzh.

Economic basis of prospective types of cargo carrying vessels for  
the Northern Steamship Company. Trudy LIVT no.65:26-35 '64.

(MIRA 18:10)

SOV/123-59-15-59751

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 15, pp 121 - 122  
(USSR)

AUTHORS: Borin, F.A., Ivliyeva, M.P.

TITLE: On the Recrystallization of Aluminum and Its Alloys With Zirconium and Magnesium

PERIODICAL: Sb. nauchn. tr. Nauchn.-tekhn. o-vo tsvetn. metallurgii, Mosk. in-t tsvetn. met. i zolota, 1958, Nr 29, pp 125 - 134

ABSTRACT: Al of 99.99% and 99.97% purity was taken for the investigations as well as alloys of Al with 1 and 3% of Mg, and Al with 0.01, 0.1, 1 and 2% of Zr. The specimens were deformed by 4 - 92% and annealed at temperatures from 100 - 600°C. Microsections were made of the specimens on which, after etching, the average size of grain was determined. The crystal size of Al of 99.97% purity recrystallizing at a temperature of 600°C after the critical deformation amounted to 1,600  $\mu$ , that of Al of 99.99% purity to 2,400  $\mu$ . The critical degree of deformation for all alloys was 4%. Admixtures of Zr and Mg also contributed the more to a reduction in the size of the recrystallized grain, the greater the quantities of

Card 1/2

SOV/123-59-15-59751

On the Recrystallization of Aluminum and Its Alloys With Zirconium and Magnesium admixtures. The effects of Zr are greater than those of Mg. The behavior of alloys with 1% Zr content is abnormal, as they posses a second maximum on their recrystallization curves at a deformation of 92%. Very small admixtures make the temperature of recrystallization increase considerably. The deformation of Al practically has no effect on the electric conductivity, which shows that in pure Al the phenomenon of regression takes place during the process of deformation or, at normal temperatures, after deformation. 8 figures, 3 references.

P.S.M.

Card 2/2

L 46036-66 EWT(m)/SWP(t)/ETI IJP(c) JP  
ACC NR: AT6022711

SOURCE CODE: UR/2848/56/000/041/0227/0231

61

B+

AUTHORS: Krestovnikov, A. N.; Glazov, V. M.; Ivliyeva, V. I.; Makhmudova, N. M.

ORG: Moscow Institute of Steel and Alloys, Department for Physico-chemical Investigation of Manufacturing Processes of Semiconductor Materials and Pure Metals (Moskovskiy institut stali i splavov, Kafedra fiziko-khimicheskikh issledovanii protsessov proizvodstva poluprovodnikovykh materialov i chistykh metallov)

TITLE: Investigation of electrical conductivity of alloys belonging to the system  $Sb_2Te_3 - Sb_2S_3$  in the solid and liquid state

SOURCE: Moscow. Institut stali i splavov. Sbornik, no. 41, 1966. Fizicheskayn khimiya metallurgicheskikh protsessov i sistem (Physical chemistry of metallurgical processes and systems), 227-231

TOPIC TAGS: antimony compound, antimony sulfide, tellurium containing alloy, electric conductivity, semiconductor conductivity, alloy phase diagram

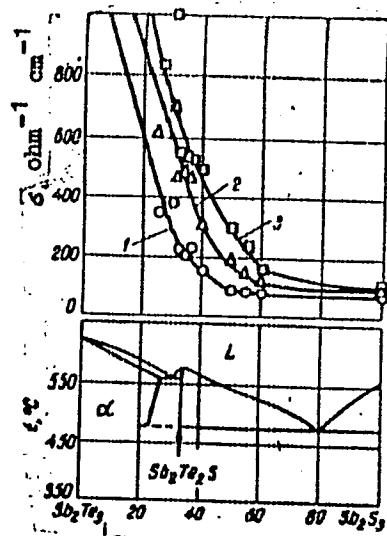
ABSTRACT: The electrical conductivity of the system  $Sb_2Te_3 - Sb_2S_3$  was studied as a function of composition and temperature. The investigation supplements the results of N. Kh. Abrikosov and V. I. Ivliyeva [No further reference given. Note of abstracter]. The experimental procedure is described by D. A. Petrov and V. M. Glazov (Zavodskaya laboratoriya, 1958, No. 1). The experimental results are presented graphically (see Fig. 1). It was found that all alloys of this system are semiconductors in the liquid state. From the appearance of the conductivity-temperature-composition curves, it is

Card 1/2

L 46036-56

ACC NR: AT6022711

Fig. 1. Comparison of the concentration dependence of electrical conductivity of melts of the system  $Sb_2Te_3 - Sb_2S_3$  with the phase diagram of this system. (The data for the construction of the phase diagram were taken from the work of N. Kh. Abrikosov and V. I. Ivliyeva). 1 - 600C, 2 - 700C, 3 - 800C.



concluded that, contrary to the assertion of N. Kh. Abrikosov and V. I. Ivliyeva, no ternary compound exists in this system. Orig. art. has: 3 graphs.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 001

Card 2/2 4/11

69403

SOV/137-59-4-8720

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 4, p 197 (USSR)  
18.1200A

AUTHORS: Zakharov, M.V., Ivliyeva, V.I.

TITLE: Durable and Temporary Hardness of Some Metals and Chemical Compounds at Corresponding Temperatures

PERIODICAL: Sb. nauchn. tr. Nauchno-tekhn. o-vo tsvetn. metallurgii, Mosk. in-t  
tsvetn. met. i zolota, 1958, Nr 29, pp 84 - 92

ABSTRACT: The authors determined durable and temporary (hot) hardness of cubic ( $Pb$ ,  $Al$ ,  $Cu$ ,  $Ni$ ) and hexagonal ( $Cd$ ,  $Zn$ ,  $Mg$ ,  $Ti$ ) metals and of some chemical compounds on Cu and Al bases at corresponding temperatures ( $0.4 - 0.8 T_{m.p.}$ ). It was established that in cubic metals durable and temporary hardness raised with higher melting point. Having the same refractoriness, the metals of hexagonal system possess higher durable and temporary hardness; they are, however, characterized by more intensive softenability, proportional to raising temperatures. In most metals the rate of hardness decrease diminishes when approaching the solidus. Chemical compounds of high hardness and brittleness at room temperatures are softening by tens and hundreds of times at

Card 1/2

69403

SOV/137-59-4-8720

Durable and Temporary Hardness of Some Metals and Chemical Compounds at Corresponding Temperatures

temperatures of the order of magnitude of 0.8  $T_{m.p.}$ . No definite correlation between hardness and refractoriness of chemical compounds at corresponding temperatures was observed. Durable hardness of chemical compounds depends in a high degree on the structure of the crystalline lattice. Usually the hardness of the compounds increases with a more complex composition and structure of its crystalline lattice. Very high durable hardness at 0.8  $T_{m.p.}$  was revealed in complex-structure chemical compounds such as  $Al_2CuMg$  and  $Al_5FeSi$ .

E.K.

✓

Card 2/2

IVLIYeva, Ye. A.

KOROL'KOV, I.I.; KRUPNOVA, A.V.; GARMANOVA, Ye.N.; IVLIYeva, Ye.A.

Effect of the diffusion of sugar on its yield in percolation  
hydrolysis of wood. Gidroliz. i lesokhim. prom. ll no.2:1-5  
'58. (MIRA ll:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrolyznoy i  
sul'fitno-spirtovoy promyshlennosti.  
(Sugar) (Hydrolysis)

KOROL'KOV, I.I.; TYAGUNOVA, Z.A.; IVLIYEVA, Ye.A.; RYABOVICH, V.I.;  
PAPASHNIKOV, L.M.

Kinetic method of evaluating systems of percolation hydrolysis of  
sawdust. Gidroliz. i lesokhim. prom. 11 no.6:3-6 '58.

(MIRA 11:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidroliznoy i  
sul'fitno-spirtovoy promyshlennosti.  
(Hydrolysis)

SUMETSKIY, I.Sh.; IVNENKO, A.Ya.

Automatic regulator for pumping stations. Gor. zhur no.4:75-76 Ap '63.  
(MIRA 16:4)  
(Pumping stations) (Automatic control)

IVNITSKAYA, A.; BLAGOSKLONOV, K.N., kand.biol.nauk

Incident in a traveling bee yard. IUn. nat. no.8:22-23 Ag '58.  
(MIREA 11:9)  
(Birds, Injurious and beneficial)

KAYNARSKIY, I.S.; DEGTYAREVA, E.V.; PINDRIK, B. Ye.; KUKHTENKO, V.A.;  
KULAKOV, N.I.; BEL'CHENKO, B.I.; IVNITSKAYA, N.S.; SMORODA, I.M.;  
SHAROV, M.F.; KOZIN, L.M.; KVASHA, A.S.; PELESHCHUK, M.I.; PRYAKHIN,  
L.G.; LEVINA, L.I.; DANILOV, V.I.; DIDENKO, S.Yu., PROTSENKO, G.A.

Reducing dust formation from dinas bricks and dinas mortar.  
Ogneupory 29 no.3:109-112 '64  
(MIRA 17:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov  
(for Kaynarskiy, Degtyareva, Pindrik, Kukhtenko).
2. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy koksokhimicheskoy promyshlennosti (for Kulakov, Bel'chenko, Ivnitskaya).
3. Vsesoyuznyy trest po stroitel'stvu i montazhu koksokhimicheskikh zavodov (for Peleshchuk, Pryakhin, Levina).
4. Ukrainskiy nauchno-issledovatel'skiy institut gigiyeny truda i professional'nykh zabolеваний (for Danilov, Didenko, Protsenko).

SMIRNOV, A.I.; IVNITSKAYA, R.B.; ZALAVINA, T.P.

Experimental data on the possibility of the chemical precipitation of phosphates from sea water. Trudy GIGKHS no.7:289-302 '62.

(Phosphate)

(Sea water)

(MIRA 16:5)

IVNITSKAYA, Tamara Vasil'yevna

[Publications of documents on the history of the working class of  
the U.S.S.R., 1918-1920] Publikatsii dokumentov po istorii rabochego  
klassa SSSR, 1918-1920 gg. Moskva, Glav. arkhiv. upravlenie SSSR,  
1960. 71 p. (MIRA 14:7)  
(Labor and laboring classes)

IVNITSKAYA, V.Ye.

How various methods of cultivating alfalfa sod affect microbiological processes in light-colored Chestnut soils of Azerbaijan. Trudy Inst. mikrobiol. no.7:275-284 '60. (MIRA 14:4)

1. Kafedra fiziologii rasteniy Azerbaydzhanskogo sel'skokhozyaystvennogo instituta.  
(ALFALFA) (TILLAGE) (AZERBAIJAN--SOIL MICRO-ORGANISMS)

NIKBERG, I.M., inzh.; IVNITSKIY, B.Ya., inzh.

Wear-resistant materials for parts of blast furnace charging  
equipment. Stal' 23 no.3:205-206 Mr '63. (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii  
proizvodstva i truda chernoy metallurgii.  
(Blast furnaces--Equipment and supplies)  
(Mechanical wear)

AMINOVA, R.Kh., kand. ist. nauk; TETENEVA, L.G., kand. ist. nauk;  
ALIMOV, I.A.; IMITRIYEV, G.L.; DZHAMALOV, O.B., doktor  
ekon. nauk, redaktor ; DZHURAYEVA, T., kand. ist. nauk,  
red.; ATFENYUK, S.Ya., red.; DANILOV, V.P., glav. red.;  
EELOV, G.A., red.; GRIGOR'YAN, L.L., red.; IBRAGIMOV, Z.I.,  
red.; IVNITSKIY, N.A., red.; IL'YASOV, S.I., red.; KAKABAYEV,  
S.D., red.; KAMENSKAYA, N.V., red.; KRAYEV, M.A., red.;  
KULIYEV, O.K., red.; MAKHARADZE, N.B., red.; OBICHKIN, G.D.,  
red.; PLESHAKOV, S.T., red.; RADZHABOV, Z.I., red.; SELEZNEV,  
M.S., red.; TURSUNBAYEV, A.B., red.; FEDOROV, A.G., red.;  
SHEPELEV, T.V., red.; FATLAKH, B., red.; MASHARIPOVA, D.,  
red.; BULATOVA, R., red.; GOR'KOVAYA, Z.P., tekhn. red.;  
KARABAYEVA, Kh.U., tekhn. red.

[Socialist reorganization of agriculture in Uzbekistan]  
Sotsialisticheskoe pereustroistvo sel'skogo khoziaistva v Uz-  
bekistane, 1917-1926 gg. Pod red. O.B.Dzhamalova. Tashkent,  
Izd-vo Akad. nauk UzSSR. Vol.1. 1962. 792 p. (MIRA 16:5)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut istorii i  
arkheologii. (Uzbekistan--Agriculture)

SHAROVA, P.N.; IVNITSKIY, N.A., otv. red.; KOVALENKO, D.A., red. izd-va; PRUSAKOVA, T.A., tekhn. red.

[Collectivization of agriculture in the Central Chernozem Region, 1928-1932] Kollektivizatsiya sel'skogo khoziaistva v Tsentral'no-chernozemnoi oblasti, 1928-1932 gg. Moskva, Izd-vo Akad. nauk SSSR, 1963. 285 p. (MIRA 16:4)  
(Central Chernozem Region—Collective farms)

IVNITSKIY, T. G., Candidate Phys-Math Sci (diss) -- "Projective geometry in the works of K. A. Andreyev, A. K. Vlasov, and N. A. Glagolev". Khar'kov, 1959. 12 pp (Min Higher Educ Ukr SSR, Khar'kov Order of Labor Red Banner State U im A. M. Gor'kiy), 150 copies (KL, No 25, 1959, 126)

L 13021-66 EXP(6)/T/EWP(1) LIP(c)  
ACC NRT AP6001203

SOURCE CODE: UR/0378/65/000/005/0060/0065

AUTHOR: Ivnitskiy, V. A. (Candidate of Technical Sciences, Consultant)

ORG: TsMIS "Sel 'khoztekhnika," Moscow

TITLE: Asymptotic study of the stationary queue in the case of a generalized input flow

SOURCE: Kibernetika, no. 5, 1965, 60-65 16,44,55

TOPIC TAGS: reliability engineering, automatic control, queuing theory, Markov process, random process

ABSTRACT: The paper investigates a unilinear system of mass servicing with expectation. The single request servicing is a special case of a random quantity with an arbitrary distribution law. Here the input accepts a Markovian flow the parameters  $\lambda_i$  of which depend on the length of the queue  $i$ . The rate of servicing also depends on the length of the queue. In the theory of reliability,  $\lambda_i$  corresponds to the intensity of breakdowns and often the actual values of this parameter are quite small. Consequently, using the recurrent method the author derives the asymptotic formulas (for  $\lambda_i \rightarrow 0$ ) of the stationary distribution of queue lengths assuming a weak input flow. The results may prove very useful in the reliability theory since they permit the incorporation of various kinds of redundancies, and the relationships between the breakdown intensity and load whenever a group of setups is serviced by a single crew. Author expresses sincere gratitude to I. N. Kovalenko, under whose direct supervision the present investigation was conducted. Orig. art. has: 39 formulas.

52

6

SUB CODE: 12/ SUBM DATE: 14Nov64/ ORIG REF: 004

UDC: 512.152

TS  
Card 1/1

L 06527-67 EWT(d) EWP(1) IJP(c)  
ACC NR: AP7000468 SOURCE CODE: UR/0103/66/000/005/0091/0102

AUTH OR: Ivnitskiy, V. A.

ORG: none

TITLE: Queueing system with an unreliable instrument

SOURCE: Avtomatika i telemekhanika, no. 5, 1966, 91-102

TOPIC TAGS: queueing theory, poisson equation, asymptotic expansion

ABSTRACT: The single-line queueing system analyzed has Poisson flow input and arbitrarily distributed queueing time. The system is liable to failure and may be restored to proper operation while occupied or while idle. An input queue consisting of a finite number of "users" is also analyzed. The generating function of queue length in the case of a finite number of users is described by an asymptotic expansion to series by powers of the small parameter  $1/n$ , where  $n$  is considered to be a large number. The author thanks I. N. Kovalenko under whose leadership this work was carried out. Orig. art. has: 35 formulas. [JPRS: 37,380]

SUB CODE: 12 / SUBM DATE: 15 Dec 65 / ORIG REF: 007 / OTH REF: 002

Card 1/1 eqfz

UDC: 519.152 -

0923

1173

AUTHORS: Afanas'yev, V. D., Candidate of Technical Sciences, Ivobotenko, B. A., Engineer 105-58-3-3/31

TITLE: Speed Control of a Direct Current Motor When Fed by a Magnetic Amplifier (Regulirovaniye skorosti dvigatelya postoyannogo toka pri pitanii yego ot magnitnogo usilitelya)

PERIODICAL: Elektrichestvo, 1958, Nr 3, pp. 14-19 (USSR)  
~~Artificial amplifier~~

ABSTRACT: An approximated, yet rather simple computation method is given here. It admits the determination of the mechanical characteristics of the amplifier motor system according to the work characteristic of the amplifier from the catalogue. For the computation of the static characteristics of direct current motors of low output which are fed from the power supply (industrial frequency) over a magnetic amplifier the inductive resistance of the armature can be neglected and substituted by an equivalent effective resistance  $R_e$ ... (equation (1)). Thus the task consists in finding artificial amplifier characteristics in various load resistances which differ from the nominal ones. For this purpose the conception of the universal characteristic (Ref. 1) is used. The amplifier

Card 1/3

Speed Control of a Direct Current Motor When Fed by a Magnetic Amplifier 105-58-3-3/31.

characteristic consists of relative units, i.e. as function of the steering-control current, taking into account the positive feed-back of the amplifier. The experimental- and computed characteristics of the magnetic amplifier PMU-1 given here show that they differ by 10%. Therefore it can be assumed that the computation method given here guarantees sufficient accuracy for practice. The computations for other amplifiers have analogous results. The description of the checking of the possibility of a substitution of the motor load by an equivalent effective resistance by experimental way follows. It is shown that the introduction of only corresponding positive current feed-back is not sufficient in order to obtain fixed mechanical characteristics of the motors. Besides this also the negative voltage feed-back has to be carried out. The experiments showed that in schemes with magnetic amplifiers with internal feed-back it is necessary to use additionally a small winding for the external positive current feed-back; i.e. in such a way that the current feed-back factor is increased by 3-5% and the carrying out of the negative voltage feed-back is thus facilitated. Comprisingly is said that the selection of the amplifier type is very important for securing the demanded

Card 2/3

8 (5)  
AUTHOR:

B. A.  
Ivobotenko, Boris Alekseyevich, Post- SOV/161-58-4-12/28  
graduate Student

TITLE: Comparative Theoretical Examination of Reaction Motors With  
Concentrated and Distributed Winding on the Stator (Srovni-  
tel'noye teoreticheskoye issledovaniye shagovykh reaktivnykh  
elektrodvigateley s sosredotochennymi i raspredelennymi  
obmotkami na statore)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Elektromekhanika i  
avtomatika, 1958, Nr 4, pp 83-95 (USSR)

ABSTRACT: The following requirements are to be met with by reaction  
motors working as power engines: An impulse frequency up to  
200 per second and more, a reaction of some degrees, a shaft-  
torque up to 1 mkg and more, as well as the possibility of  
reversing during work. Of all known designs, the three-stator  
motor (TSM) meets these demands best. Its advantages and  
drawbacks are shown here. A reaction motor with distributed  
multiphase windings on the stator does not show the drawbacks  
of the TSM and enables a high working speed. The exactness of  
giving the impulses depends here, however, on the amplitude  
ratio of the impulses conducted to the winding phases. This

Card 1/4

Comparative Theoretical Examination of Reaction SOV/161-58-4-12/28  
Motors With Concentrated and Distributed Winding on the Stator

restriction is eliminated if a split stator winding is used. All conditions for a reaction-field are thus fulfilled. A threephase reaction motor TSM is first examined here, concerning the data characterizing its work. A reaction motor with a split multiphase winding on the stator (RMS) is then examined and compared with the TSM. It is shown that the static synchronizing moment of a real TSM does not reach the maximum value in jumps, but according to a steeply rising curve. The main advantages of the TSM are a great synchronizing moment and therewith the high accuracy of impulse-giving. On both motors - TSM and RMS - equivalent measurements were used here for the examination, and the parameters to be compared were expressed by the reaction  $a$ , thus enabling a comparison. The comparison shows that when increasing the number of winding branches on the RMS, and simultaneously reducing the number of poles, the maximum static moment as well as the static and dynamic efficiency factor of the RMS increase, while the time constant of its winding remains practically unchanged, and is smaller by one order of magnitude, compared with the time constant of the stator

Card 2/4

Comparative Theoretical Examination of Reaction  
Motors With Concentrated and Distributed Winding on the Stator

SOV/161-58-4-12/28

winding of the TSM. With a predetermined reaction  $a$ , this means that it is more advantageous to have an RMS with a smaller number of poles, and to obtain the necessary reaction at the expense of an increase in the number of the parallel branches in the phases. However, the control circuit of the RMS becomes thereby more complicated. The most suitable variant will, therefore, depend on the demands made for each individual case. A comparison further shows that the power consumption of the RMS and the time constant of its winding decreases proportionally, when further reducing the reaction of a two-pole motor at the expense of an increase of the number of winding branches. The use of the RMS is, therefore, of special advantage for a small reaction. It is specially pointed out that it was the purpose of the present paper to determine that the use of distributed windings on the stator constitutes an excellent solution for the production of reaction motors with a high working speed. The results and equations for a split multiphase winding obtained here, can be applied to a case with any other distributed winding.

A drawback of motors with distributed windings is the small

Card 3/4

Comparative Theoretical Examination of Reaction SOV/161-58-4-12/28  
Motors With Concentrated and Distributed Winding on the Stator

synchronizing moment. There are 3 references, 1 of which  
is Soviet.

ASSOCIATION: Kafedra elektricheskikh mashin Moskovskogo energeticheskogo  
instituta (Chair for Electrical Machines at the Moscow  
Institute of Power Engineering)

SUBMITTED: May 29, 1958

Card 4/4

Vsesoyuznoye ob"edineniye nauchno-tekhnicheskikh i tekhnicheskikh nauchnykh  
professorov v mashinostroyenii i avtomatizirovannom elektrosvyazi i preobrabotivayushchikh  
materialakh. 34, Moscow, 1959.

Elektronnaya i avtomatizatsionnaya prochnopoluchnaya ustroistvo; trudy nauchno-tekhnicheskikh  
(Elektrosvyaz i Avtomatika) Industrial'nykh Sistem. Transactions of the Conference  
on Electric Drive and Automation in Industrial Systems. 1960. 470 p. 11,000 copies printed.  
Moscow, Gostorggizpolizdat. 1960.

General Eds.: I.I. Petrov, A.A. Shvetsov, and N.G. Chirkalina. Eds.: I.I. Sud, and

I.P. Sklyarev. Tech. Eds.: K.P. Vorotin, and G.Ye. Larionov.

Purpose: The collection of reports is intended for the scientific and technical  
personal of scientific research institutes, plants and schools of higher  
education.

Content: The book is a collection of reports submitted by scientific workers at  
various scientific institutes and schools of higher education at the third  
Joint All-Union Conference on the Automation of Industrial Processes in Machine  
Buildings and Automated Electric Drives in Industry held in Moscow on  
May 12-16, 1959. The Conference was called by the Academy of Sciences USSR, the  
Central Scientific Planning Commission (CSC), the General Directorate  
of Scientific Research (GDR), the State Committee for Standardization (GOSTR),  
the All-Union Scientific-Technical Committee on Automatic Control (Scientific-  
Technical Committee on Automatic Control and Electrical Drive), the Keldysh Institute  
of Mathematics-Tekhnologicheskii Institut Elektroniki i Elektronicheskikh Obrudovaniya,  
the Institute of Automation and Telemechanics  
of the Academy of Sciences USSR, the Institute of Technological Mathematics  
of the Academy of Sciences USSR, and the Institute of the Technology of Machine  
Buildings of the Institute of Science of Materials of the Academy of Sciences USSR.  
It was the purpose of the Editorial Board to arrange the reports in a way which  
would ensure a relatively systematic presentation of theoretical and practical  
problems relating to electric drives and automatic controls of industrial mecha-  
nisms used in various branches of industry. The book also contains articles on elec-  
tric drive and thermal solution are utilized. The book also contains articles on elec-  
tric mobility and means of automation.  
Considerable attention is paid to non-  
contact automatic control systems, including systems with semiconductor devices  
and magnetic amplifiers, and to computers intended both for the analysis and the  
synthesis of linear and nonlinear automatic regulation and control systems.  
A number of papers already published in journals or official publications have been considerably  
revised and enlarged. Those which have appeared in Volume V of TITI SF transactions  
or in the journal "Eletrosvyaz i Avtomatika" are marked with an asterisk. In particular  
these are economic uses of the papers.

PART II: GENERAL PROFILE OF CONTENT AND ORGANIZATION OF CONTENT.  
PARTICULARS OF ELECTRIC DRIVE AND AUTOMATION OF CONTROL.

- Borodulin, N.D., Doctor of Technical Sciences, and F.F. Sazanov, Engineer. Asynchronous Induction Machines and Prospects of their Application. 421
- Chernikov, P.A., Doctor of Technical Sciences. High-Power Rotating Amplifiers. 422
- Fedorov, D.Z., Doctor, Candidate of Technical Sciences. Rotating Amplifiers with Longitudinal Fields. 427
- Koile, V.V., Engineer. Rotating Amplifiers of Transverse Field with Radial Fluxes. 429
- Kopylov, I.P., Candidate of Technical Sciences. Motor-Amplifiers Combining a Magnetic Amplifier With an Electric Machine. 430
- Krotovskii, B.D., and L.A. Solodenko, Engineers. Work of Improving the Current Operations of Stepper-Step Electric Motors. 431
- Rozov, O.I., Professor, Doctor of Technical Sciences. Construction Problems of Modern High-Voltage Equipment. 432
- Sarabdin, S.M., and M.M. Salnikov, Engineers. Interlocking Control with the Use of Standard Units of Low-Current Equipment. 433
- Safonovich, T.B., Candidate of Technical Sciences. Magnetic Amplifiers for Automatic Control Systems and the Application of Industrial Electric Drives. 434
- Sil'man, E.L., Engineer, and T.S. Serebryakova, Engineer. Candidate of Technical Sciences. Calculation of Single-Cycle Magnetic Amplifiers With Self-Help Stabilization. 438
- Sokolov, J.I., Engineer. Some Theoretical and Practical Problems Relating to High-Speed Magnetic Amplifiers for Servosystems. 439
- Solntsev, I.S., Engineer. Partial Simulation of Elevated-Frequency Electric Systems. 440
- Tolent, Yu.M., Doctor of Technical Sciences. Improving Reliability and Accuracy of Long-Distance Transformer Transmissions. 445
- Konstantinov, V.G., Candidate of Technical Sciences. High-Frequency Semiconductor Amplifiers for the Control of Electric Machine Excitation. 446

IVOBOTENKO, B.A., inzh.

Step motors. Elektrichestvo no.8:54-61 Ag '60.  
(MIRA 13:8)

1. Moskovskiy energeticheskiy institut.  
(Electric motors) (Automatic control)

IVOBOTENKO, B.A., inzh.

Choice of the main geometrical dimensions in designing reactive  
step motors. Vest. elektroprom. 31 no.8:57-62 Ag '60. (MIRA 15:5)  
(Electric motors)

RATMIROV, Valeriy Arkad'yevich; IVOBOTENKO, Boris Aleksseyevich;  
VUL'FSON, I.A., red.; FRIDKIN, L.M., tekhn. red.

[Pulse motors for automatic control systems] Shagovye dvigateli  
avtomaticheskogo upravleniya. Moskva, Gosenergo-  
izdat, 1962. 125 p. (Biblioteka po avtomatike, no. 66)  
(MIRA 16:1)

(Electric motors)

IVOBOTENKO, B.A.

Experimental determination of the static synchronizing torque  
of step-by-step motors. Elektricheskiye no.4:71-73 Ap '62.  
(MIRA 15:5)

1. Moskovskiy energeticheskiy institut.  
(Electric motors)

B  
IVOBOTENKO, Y.A., inzh. (Moskva)

Problem concerning the individual drives of the cages of reduction  
and gauging pipe-rolling mills. Elektrichestvo no.6:73-76 Je '62.  
(MIRA 15:6)  
(Pipe mills--Electric driving)

TSATSENKIN, V.K., inzh.; IVOBOTENKO, B.A., inzh.

Dynamics of step-type electric motors. Elektrichesvo  
no.9:67-72 S '62. (MIRA 15:9)

1. Moskovskiy energeticheskiy institut.  
(Electric motors)

IVOBOTENKO, B.A., inzh.; RUBTSOV, V.P., inzh.

Electromagnetic design of reactive reductor-type stepping motors.  
Trudy MEI no.38:22 3-266 '62. (MIRA 17:2)

RATNIROV, Valeriy Arkad'yevich; IVOBOTENKO, Boris Alekseyevich;  
TSATSENKIN, Viktor Kirillovich; SADOVSKIY, Lev Aleksandrovich;  
CHILIKIN, M.G., prof., red.; GERSHENZON, G.S., red.

[Systems with stepping motors] Sistemy s shagovymi dvigate-  
liami. Moskva, Energiia, 1964. 134 p. (Biblioteka po avto-  
matike, no.110. Elektroprivody s poliuprovodnikovym upravle-  
niem) (NIRA 17:11)

SHPOLYANSKIY, V.A.; CHERNYAGIN, B.M.; IVOBOTENKO, B.A., kand.  
tekhn. nauk, retsentent; BARANOVA, Z.S., inzh., red.

[Electrical timing devices] Elektricheskie pribory vremenii.  
Moskva, Mashinostroenie, 1964. 387 p.  
(MIRA 17:11)

L 03990-67

ACC NR: AP6012113

(A, N) SOURCE CODE: UR/0403/66/000/007/0027/0027

AUTHORS: Ivobotenko, B. A.; Gertsov, S. M.; Lovenetskiy, Yu. N.; Lutsenko, V. Ye.; Minkin, M. M.

17

ORG: none

TITLE: A multiphase step electric motor. Class 21, No. 180239

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 27

TOPIC TAGS: electric motor, torque

ABSTRACT: This Author Certificate presents a multiphase step electric motor of the induction type with control windings and with permanent excitation magnets located in the stator. The electric motor has a toothed rotor without a winding (see Fig. 1). The design increases the torque in given size motors and simplifies their production. The stator is made with an internal permanent magnet in the form of two symmetrical halves magnetized with opposite polarity. The permanent magnet is enclosed between the halves of the stator.

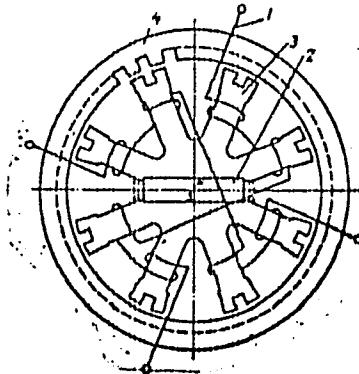
Card 1/2

UDC: 621.313.13.025.4-133.3

L 08990-67

ACC NR: AP6012113

Fig. 1. 1 - control windings; 2 - permanent magnet; 3 - stator; 4 - rotor



Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 21Jan65

L 29/01-06 ENT(m)/ENT(e)/EMP(k)/EWA(a)/T/EWP(v)/EMP(t)/EPI IJP(c) JD/HM/CD-2

ACC NR: AP6015102

(N)

SOURCE CODE: UR/0135/66/000/005/0010/0013

23

20

B

AUTHOR: Ivochkin, I. I. (Engineer)

ORG: MVTU im. N. E. Bauman

TITLE: Mechanical properties of a welded joint of VKS1 high-strength steel working under biaxial tension

18

18

18

18

SOURCE: Svarochnoye proizvodstvo, no. 5, 1966, 10-13

TOPIC TAGS: high strength steel, superstrength steel, steel welding, butt welding, weld structure, weld strength/VKS1 steel

ABSTRACT: Thin-wall pressure vessels welded from high-strength steel sheets (tensile strength 180—200 kg/mm<sup>2</sup>) often fail at relatively low stresses. The effect of welding conditions on the mechanical properties of VKS1 steel welds has been investigated. Steel sheets 2.5 mm thick, heat treated to a tensile strength of 200 kg/mm<sup>2</sup>, were TIG welded without backing at a speed of 10—48 m/hr, annealed at 940C for 30 min, air cooled, tempered at 240C for 4 hr and subjected to hydrostatic bulging tests. Specimens welded at speeds of 29—48 m/hr had a columnar structure and failed in the weld. Specimens welded at lower speeds cracked mostly across the weld owing to the structural inhomogeneity of the joint. The highest strength, though much lower than that of the base metal, was obtained at a welding speed of 19—28 m/hr. Further experiments showed that the mechanical properties of the welds made at a speed of 29—48 m hr can be greatly increased by suppressing the formation of

Card 1/2

UDC: 621.791.052.011

L 39761-66

ACC NR: AP6015102

17 27 18 3

of a columnar structure by adding a mixture of iron and ferrotitanium powders to the bath behind the arc. The cold powder cools the tail portion of the bath so that it solidifies simultaneously along the entire volume, while the modifying action of titanium produces a fine-grained weld structure. The method makes it possible to increase the mechanical properties of welded joints made at high welding speeds and to weld circumferential and longitudinal welds under identical conditions at high speeds. Orig. art. has: 5 figures.

[MS]

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 004/ ATD PRESS: 4259

Card 212 K/S

L 3853-66 EWP(e)/EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/EIP(k)/EWP(z)/EWP(b)/EWA(h)/EWA(s)  
ACC NR: APS026516 JD/HM/WB SOURCE CODE: UR/0286/65/000/019/0048/0048

INVENTOR: Gavril'yuk, V. S.; Ivochkin, I. I.

44,55 77,55

ORG: none

TITLE: Method of introduction of a powdered modifier. Class 21, No. 175158

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 48

TOPIC TAGS: metal, metal welding, weld modifier, weld defect, welding technology, weld hot cracking

44,55

ABSTRACT: An Author Certificate has been issued for a method for the introduction of a powdered modifier into the solidifying portion of a weld. To improve the weld resistance to hot cracking, prevent oxidation of the modifier, and ensure a uniform distribution of the modifier throughout the weld, the modifier is introduced by a jet of shielding gas.

[AZ]

SUB CODE: 13/ SUBM DATE: 10Mar64/ ATD PRESS: 4152

44,5  
Card 1/1

UDC: 621.791.856.016

L 11651-66 EWT(m)/EWP(w)/EWA(d)/EWF(v)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c)  
ACC. NR: AP6000613 SOURCE CODE: UR/0135/65/000/012/0001/0003  
MJW/JD/HM/WB

AUTHOR: Ivochkin, I. I. 1/4/57

ORG: MVTU im. N. E. Baumana

TITLE: Suppressing formation of columnar crystals by forced solidification of melt-  
ing pool 94,5e 38 36 13

SOURCE: Svarochnoye proizvodstvo, no. 12, 1965, 1-3

TOPIC TAGS: steel, superstrength steel, steel welding, steel weld, weld structure,  
columnar structure, columnar structure elimination, structure refining/VKS 1 steel

ABSTRACT: At high welding speeds, weld metal solidifies in the form of columnar crystals  
growing almost perpendicularly to the center line of the weld and forming a seam  
which is usually the weakest part of the weld. The formation of the columnar structure  
can be at least partially suppressed by lowering the rate of welding speed.  
This, however, increases the width and grain size of the heat-affected zone, i.e.,  
shifts the weakest part of the joint from the weld to the heat-affected zone. Hydro-  
static bulging tests with TIG-welded, 2.5-mm thick, VKS-1 steel sheet specimens  
showed, for instance, that specimens welded at a rate of 48 m/hr failed by longitudinal  
cracks in the weld with a thickness reduction of less than 2%. Specimens welded at  
a rate of 17 m hr failed by cracking across the weld with a thickness reduction of  
7-8%. The deterioration of the heat-affected zone and the formation of columnar

Card 1/2

UDC: 621.791.753.93:011

L 11651-66  
ACC NR: AP6000613

structure in the weld can be effectively suppressed by welding at high rates with continuous feeding of steel powder into the rear part of the melting pool. This promotes a simultaneous solidification of the whole volume of the pool, prevents growth of columnar crystals, and reduces the overheating of the heat-affected zone. In the burst test, VKS-1 steel specimens welded at a rate of 29 in/hr, with or without powder feeding, failed at respective reductions of 9-13 and 5-6%, compared to 10.5-15.5% for base sheet. The "freezing" of the melting pool appears to have some additional beneficial effects, such as lowering weld susceptibility to hot cracking and to general, intergranular, and knifelike corrosion, as was shown by preliminary experiments. It is possible that feeding metal powder into the ingot mold during pouring would reduce the zone of columnar structure in ingots. Orig. art. has 5 figures and 1 table.

[DV]

SUB CODE: 13, 11/ SUBM DATE: none/ ORIG REF: 003/ ATD PRESS: 4-175

Card 2/2

PAVLOV, Aleksandr Ivanovich; AL'SHITS, I.M., kand. khim. nauk,  
retsazent; KUZNETSOV, P.I., inzh.; IVOCHKIN, V.F., nauchn.  
red.; KUSKOVA, A.I., red.

[Bonded ship structures] Kleenye sudovye konstruktsii. Le-  
ningrad, Sudostroenie, 1965. 282 p. (MIRA 18:12)

KATK', Pavel Pavlovich; KOSTROV, Aleksey Ivanovich; FAYNBERG,  
Vsevolod Davidovich [deceased]; ATRUKH, M.G., inzh.  
retsenzent; IVOCHKIN, V.F., inzh., retsenzent; SMIRNOV,  
V.I., nauchn. red.; SHAKHNOVA, V.M., red.

[Motorboats and launches made of plastics] Shliupki i ka-  
tera iz plastmass. Leningrad, Izd-vo "Sudostroenie,"  
1964. 263 p. (MIRA 17:6)

VESHEV, A. V.; IVOCHKIN, V. G.

Electric profiling with a "Zemlia-2" induction-method  
apparatus. Razved. i okh. nedr 28 no. 6:27-34 Ju '62.  
(MIRA 15:10)

1. Leningradskiy gosudarstvennyy universitet.

(Electromagnetic prospecting—Equipment and supplies)

SHAUB, Yuryi Borisovich; IVOCHKIN, V.G., nauchn. red.; IONINA, I.N.,  
ved. red.; DEM'YANENKO, V.I., tekhn. red.

[Principles of aerial electric prospecting with the use of  
a rotating magnetic field] Osnovy aeroelektrorazvedki me-  
todom vrashchayushchegosia magnitnogo polia. Leningrad,  
Gostoptekhizdat, 1963. 227 p. (MIRA 17:1)  
(Electric prospecting)

IVOCHKIN, V.G.

Electromagnetic profiling during geological mapping. Vest. LGU  
19 no.24:69-77 '64 (MIRA 18:1)

TWCCS, P.

Once again about traffic regulation on Stalin Avenue. p. 13, (AUTO MOTOR,  
Budapest, Hungary), Vol. 8, No. 3, Feb. 1955.

SC: Monthly List of East European Accessions, (SEAI), IC, Vol. L,  
No. 5, May 1955, Uncl.

IVOCS, B.

Automobile business and automobile sports. p. 15., (AUTO MOTOR,  
Budapest, Hungary), Vol. 8, No. 3, Feb. 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,  
No. 5, May 1955, Uncl.

IVCCS, B.

The position of automobile transportation. p. 3  
A factory of autobuses. p. 5  
Vol. 9, No. 19 Oct. 1956.  
AUTO-MOTOR Budapest, Hungary

SOURCE: East European List, (EEAL) Library of Congress Vol. 6, No. 1  
January 1956.

Ivocs, B.

Conference on automobile traffic of countries with planned economies held in Sofia.

p. 737 (Hungary, Kozponti Szallitasasi Terasz. Kozlekedesi Kozlony. Vol. 13, no. 42, Oct. 1957. Budapest, Hungary)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2, February 1958

IVCCS, B.

On a study tour of automobile transportation in the Soviet Union. p. 93.

KOZLEKEDESTUDOMANYI SZEMLE. (Kozlekedes-es Kozlekedesepitesstudomanyi Egyesulet)  
Budapest, Hungary, Vol. 9, No. 3, Mar. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 7, July 1959.  
UNCL

L 32132-66 EWP(e)/EWP(t)/ETI IJP(c) JD/WE  
ACC NR: AP6023549 SOURCE CODE: HU/0014/65/098/012/0563/0568

AUTHOR: Ivocs, Laszlo (Graduate metallurgical engineer)

ORG: Ozd Metallurgical Works, Ozd (Ozdi Kohaszati Uzemek)

TITLE: Durability problems of Siemens pit furnaces from the point of view of the refractory-materials industry [This paper was presented at the Refractory Materials Industry Conference held in Miskolc-Tapolca on 14 May 1965]

SOURCE: Kohaszati lapok, v. 98, no. 12, 1965, 563-568

TOPIC TAGS: refractory, silicate, quartz, metallurgic furnace

ABSTRACT: The refractory-material components employed in the three Siemens pit furnaces operating at Ozd Metallurgical Works contribute significantly to the durability and performance of these furnaces. The operating parameters of these furnaces were described in detail and the behavior of the refractory materials during their service lives was discussed. It was found that only silicate bricks perform satisfactorily and that substitution by quartzite bricks adversely affects the lifetime of the refractory layer. Orig. art. has: 6 figures and 6 tables. [JPRS]

SUB CODE: 13, 11 / SUBM DATE: none / ORIG REF: 002 / SOV REF: 001  
OTH REF: 004

Card 1/1 BhG

UDC: 669.183.21:666.042:666.76  
0915 7512

FILIPPOV, M.P.; IVOLGA, N.F.

Spectrophotometric determination of diphenylolpropane in phenol.  
(MIRA 17:9)  
Zhur. VKHO 9 no. 2:234-235 '64.

1. Lisichanskiy filial Gosudarstvennogo instituta azotnoy  
promyshlennosti.

IVOLGIN, A.

Simplicity and modesty beautify the sportsman.  
Kryl.rod. 13 no.6:11 Je '62.

(MIRA 19:1)

IVOLGIN, A., polkovnik.

Outstanding Russian military scientist; on the 155th anniversary  
of B.S. IAKobi's birth. Voen.znan. 31 no.9:31 6 '56. (MLRA 9:11)  
(IAkobi, Boris Semenovich, 1801-1874)

I VOLGIN, A., polkovnik.

"Position engineering operations" by S. Gerbanovskii. Reviewed by  
A. Ivolgin. Voen. vest. 37 no.1:93-95 Ja '58. (MIRA 11:2)  
(Fortification, Field)  
(Gerbanovskii, S.)

IVOLGIN, A., polkovnik; SHEVCHUK, M., gvardii podpolkovnik.

On the 40th anniversary of the Great October Socialist Revolution:  
Some problems of military engineering in the Lenin documents. Voen.-  
inzh. zhur. 101 no.4:2-8 Ap '57. (MLBA 10:6)  
(Military engineering) (Lenin, Vladimir Il'ich, 1870-1924)

IVOLGIN, A., polkovnik v otstavke

Terrestrial and solar explosions. Starsh.-serzh. no. 8:33 Ag '61.  
(MIRA 14:10)

(Explosions) (Sun)

IVOLGIN, A.

City of aeronautical fame. Kryl. rod. 15 no.1:6 Ja '64c  
(MIRA 17:2)

IVOLGIN, A.

Birth of the engine. Kryl, rod. 15 no. 729 J1 '64.

(MIRA 18:1)

VINOKUROV, A.; IVOLGIN, A.; KUZ'MIN, N.; DITRIKH, N. (Kaluga)

Facts, events, people. Kryl. rod. 15 no.8:20-21 Ag '64.  
(MIRA 18:1)

IVOLGIN, Aleksandr Ivanovich, polkovnik v otstavke; KPOV, Boris Aleksandrovich, inzh.-polkovnik zapasa, laureat Stalinskoy premii; ROSSUL, N.A., polkovnik, red.; VOLKOVA, V.Ye., tekhn.red.

[Mine-laying and mine-field clearance] Minirovanie i razminirovanie. Moskva, Voen.izd-vo M-va obor.SSSR, 1960. 93 p.  
(MIRA 14:1)

(Mines, Military)

SHEVCHUK, Mikhail Konstantinovich, gvardii podpolkovnik; KATURKIN,  
Yevgeniy Afanas'yevich, kand. tekhn. nauk, inzh.-podpolkovnik;  
I VOLGIN, A.I., polkovnik, red.; SOKOLOVA, G.F., tekhn. red.

[How to overcome obstacles erected by the engineers] Kak preodo-  
levat' inzhenernye zagrazhdeniya. Moskva, Voen.izd-vo M-va obor.  
SSSR, 1961 182 p. (MIRA 15:2)  
(Mines, Military) (Obstacles (Military science))

SYTSKO, P.A.; IVOLGIN, A.I., inzh.

New developments in railroad transportation services for  
industrial enterprises. Zhel.dor.transp. 44 no.5:18-22  
Mys '62. (MIRA 15:5)

1. Rektor Belorusskogo instituta inzhenerov zheleznodorozhnogo  
transporta (for Sytsko). 2. Sekretar' Gomel'skogo oblastnogo  
komiteta Kommunisticheskoy partii Belorussii (for Ivolgin).  
(White Russia--Railroads--Freight)

S/078/60/005/012/015/016  
B017/B064

AUTHORS: Ivanov-Emin, B. N., Nisel'son, L. A., Ivolgina, A. T.

TITLE: Study of the Solubility of Scandium Hydroxide in Sodium Hydroxide Solutions

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 12,  
pp. 2841-2842

TEXT: The solubility of scandium hydroxide in sodium hydroxide solutions containing 1 - 19 moles of NaOH/l was studied at 25°C. Maximum solubility of  $\text{Sc}(\text{OH})_3$  in an 11.7-mole solution of sodium hydroxide is 5.0 g/l. The existence of peaks on the solubility curve indicates the formation of sodium hydroxoo scandiate. The solid phase up to the peak is crystalline scandium hydroxide, and the solid phase behind the peak is a hydrate of sodium hexahydroxo scandiate  $\text{Na}_3[\text{Sc}(\text{OH})_6] \cdot 2\text{H}_2\text{O}$ . N. A. Tananayev is mentioned. There are 1 figure, 1 table, and 9 references: 4 Soviet, 2 British, 2 German, and 1 Czechoslovakian. ✓

SUBMITTED: December 30, 1959  
Card 1/1

IVOLIN, Nikolay Mikhaylovich; PRYANIKOV, Ye.G., retsenzent; ALEKSEYEV,  
V.I., red.izd-va; RIDNAYA, I.V., tekhn. red.

[Experience in combining professions on Ob' River motorships]  
Opyt sovmeshcheniya professii na teplokhodakh Obi. Moskva,  
Izd-vo "Rechnoi transport," 1962. 33 p. (MIRA 16:2)  
(Ob' River--Inland water transportation--Employees)